

## C L A I M S

1. System of movable vehicle tire studs, characterized in that said system has leak proof transmission means like metal wires for moving studs in and out of stud holes on the tire shoulders, said leak proof means like wires also movable on the tire sides outside the tire casing and may be easily replaced by being threaded in and out of protruding portions of the tire (15)(13).
2. System as claimed in claim 1, wherein the length of said studs is not limited by the tire tread thickness because the studs (fig.1) may be mounted into the tire blocks in a more tilted position in relation to road surface than normal for tire studs and mounted in extra large unsiped portions of the tire shoulder blocks and requires less space than hydraulic system studs having pressure chambers for liquids, pistons, gaskets, valves etc.
3. System as claimed in claim 2, wherein said wire end in a tire stud by the tire tread, said stud preferably having a frustoconical or frusto-pyramidal stud tip (39) which is thickest at the very end of the stud to improve road grip.
4. System as claimed in claim 2, wherein the tire shoulder blocks, having extra large unsiped portions, is thereby protruding and thus making the tire tread distinctively wider than the average tire tread of the same size tire casing.
5. System as claimed in claim 4, wherein said studs may be moved manually by a small handle (fig.5,40) to a protruding or retracted position e.g. by having a pin (42) enter into notches (41).
6. System as claimed in claim 1, wherein the cross section drawing of the stud (8') and sleeve (44) shows an oblong/oval/rectangular shape thereby making it impossible for the stud to twist too much when being used.

6.

7. System as claimed in claim 1,  
wherein a stud moving source (1) positioned in the wheel  
rim may be operated either manually by a handle (2)  
or by an electromotor (3).
8. System as claimed in claim 7,  
wherein said electromotor may be activated by the driver  
by touching a switch/button on the dashboard, thereby  
transmitting e.g. radio signals to a receiver in the wheel  
rim, said receiver connected to the electromotor and thus  
making the motor's axle shaft (4) spin clockwise or anti-  
clockwise. By having threads on the axle, axle rotation  
will make e.g. metal arm (5) move wire distributor (6) and  
wires (16) and studs (8).
9. System as claimed in claim 8,  
wherein said stud moving components in the wheel centre  
are under normal circumstances leak proof and balanced /  
counterbalanced to counteract wheel imbalance when driving.
10. System as claimed in claim 8,  
wherein a display (9) on the dashboard gives the driver  
information (30) about stud protrusion.
11. System as claimed in claim 10,  
wherein said display may be adjusted by a regulator (10)  
according to tire thickness and stud protrusion.
12. System as claimed in claim 10,  
wherein there is a timer (11) available for programming how  
many minutes studs are to protrude before automatic retraction.
13. System as claimed in claim 1,  
wherein said system is energized by e.g. solar cells (12),  
induction, slip ring, pendulum dynamo, plug-in charging  
when parked.
14. System as claimed in claim 1,  
wherein the tire sides have a protruding portion (13).